SICOM6496

48G/96+8G Port Layer 3 Managed Rack Mountable Switches

- Modular design, supports max 48 gigabit fiber/copper ports or 8 gigabit SFP ports and 96 fast Ethernet ports
- Supports Layer 3 routing protocols such as RIP, OSPF and PIM
- Supports DT-Ring , MSTP and VRRP for network redundancy
- IP30 protection class

>> Overview

SICOM6496 is a layer 3 managed industrial Ethernet switch designed to operate reliably in electrically harsh and climatically demanding utility substation and industrial environments. SICOM6496 supports up to 48 gigabit fiber/copper ports or 8 gigabit SFP port and 96 fast Ethernet ports. SICOM6496 is a 19-inch rack mountable device and allows the front and rear panel mounting. SICOM6496 offers hardware wire-speed layer 3 switching, and supports many Layer 2 software features such as port, VLAN, multicast, QoS, fast redundant ring and Layer 3 functions such as RIP, OSFP. It supports Console, Telnet, Web management and network management software based on SNMP. SICOM6496 can provide solutions with high performance and high reliability for the industrial communication systems.

>> Software Functions

Switching Function

Supports VLAN
Supports GVRP
Supports port aggregation
Supports flow control
Support port rate limit

Redundancy Protocol

Supports VRRP
Supports DT-Ring, DT-Ring+, and DT-VLAN and the recovery time<50 ms
Supports RSTP/MSTP and compatible with STP

Multicast Protocol

Supports IGMP v1/v2
Supports IGMP snooping
Supports static multicast

Supports PIM-SM, PIM-DM

Routing Protocol

Supports RIPv1/v2
Supports OSFPv2
Supports static routing

Service Quality Management

Supports ACL
Supports SP and WRR queuing

Management & Maintenance

Supports Console, Telnet, and Web management methods
Supports SNMPv1/v2c and can managed by Kyvision
Supports file transfer and software update over FTP and TFTP
Supports the power alarm, port alarm, and ring alarm
Supports port mirroring
Supports Syslog
Supports LLDP
Supports RTC

IP Address Management

Supports Bootp
Supports DHCP server/relay/client

>> Product Specifications

Technical Specifications

Standard
▼ IEEE 802.3i (10Base-T)
▼ IEEE 802.3u (100Base-T)

- ▼ IEEE 802.3ab (1000Base-T)
- ▼ IEEE 802.3ad (port aggregation)
- ▼ IEEE 802.3z (1000Base-SX/LX)
- ▼ IEEE 802.3x (flow control)
- ▼ IEEE 802.1p (priority)
- ▼ IEEE 802.1Q (VLAN)
- ▼ IEEE 802.1w (RSTP)
- ▼ IEEE 802.1s (MSTP)

Switch Properties

Priority queue	8
Number of VLANs	4K
VLAN ID	1–4093
Number of multicast groups	256
Routing table	30K
MAC table	16K
Packet buffer	512 Mbit
Packet forwarding rate	71.4 Mpps
Switching delay	< 10 μs

Interface

Gigabit ports
- ▼ 1000Base-X, SFP port
- ▼ 10/100/1000Base-T(X), RJ45 port

Fast Ethernet ports
- ▼ 100Base-FX, single/multi mode, SC/ST/FC connector
- ▼ 10/100Base-T(X), RJ45 port

Console port	RS232,RJ45
Number of slots	4

LED

LED on front panel
- ▼ Running LED: Run
- ▼ Power LED: PWR1, PWR2
- ▼ Port LED: LINK/ACT, LINK, ACT

Power Requirements

Power input	48DC(36-72VDC), 220AC/DC(85-264VAC/120-300VDC)
Power terminal	3-pin 7.62 mm-spacing plug-in terminal block
Power consumption	<150W
Overload protection	Support
Reverse connection protection	Support
Redundancy protection	Support

Physical Characteristics

Housing	Metal
Cooling	Natural cooling, fanless
Protection Class	IP30
Dimensions(WxHxD)	482.6mm×355mm×405mm (19×13.98×15.94in.)
Weight	<20Kg (44.09 pound)
Mounting	19 inch rack mounting

Environmental Limits

Operating temperature	-40°C to +85°C (-40°F to 185°F)
Storage temperature	-40°C to +85°C (-40°F to 185°F)
Ambient Relative Humidity	5% - 95% (non-condensing)

Quality Assurance

MTBF	137,000 hrs
Warranty	5 years

Approvals

Please check Kyland website for the latest updates.

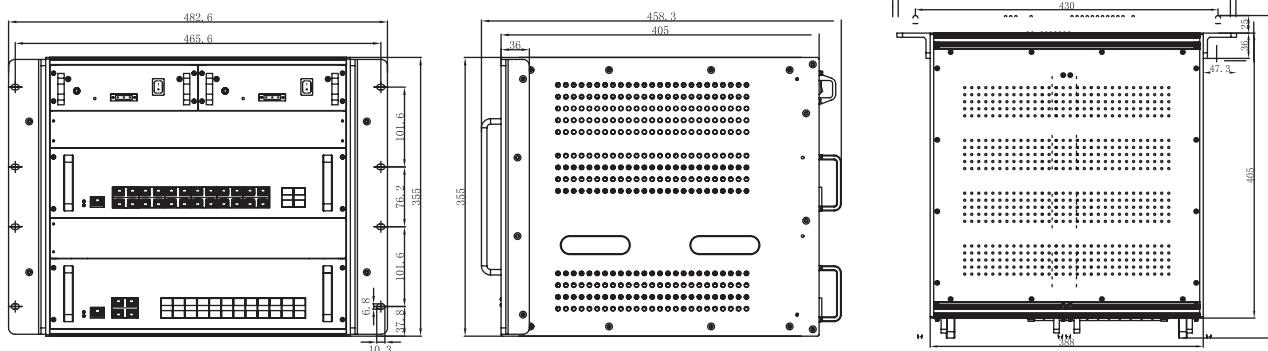## Industry Standard

EMI
- ▼ FCC CFR47 Part 15,EN55022/CISPR22,Class A

EMS
- ▼ IEC61000-4-2(ESD) ±6kV(contact),±8kV(air)
- ▼ IEC61000-4-3(RS) 10V/m(80MHz-2GHz)
- ▼ IEC61000-4-4(EFT) Power Port:±2kV;Data Port:±2kV
- ▼ IEC61000-4-5(Surge) Power Port:±2kV/DM,±2kV/CM;Data Port:±2kV
- ▼ IEC61000-4-6(CS) 3V(10kHz-150kHz);10V(150kHz-80MHz)
- ▼ IEC61000-4-16(common mode conduction) 30V(cont.),300V(1s)

Machinery
- ▼ IEC60068-2-6 (vibration),
- ▼ IEC60068-2-27 (shock),
- ▼ IEC60068-2-32 (free fall)

≫ Mechanical Drawing

Ordering Information

Chasis	
SICOM6496-MB	SICOM6496 Chassis
Power Supply Module	
SM6.3-Power-H1	220AC/DC(85-264VAC/120-300VDC)
SM6.3-Power-L1	48DC(36-72VDC)
Interface Module	
SM6.3-4G20GE	4x1000Base-X,10/100/1000Base-T(X) Combo port;20x10/100/1000Base-T(X) RJ45 port
SM6.3-4G20GX	4x1000Base-X,10/100/1000Base-T(X) Combo port; 20x1000Base-X,SFP port
SM6.3-4GX48T	4x1000Base-X,SFP port; 48x10/100Base-T(X) RJ45 port
SM6.3-4GX8SFP40T	4x1000Base-X,SFP port; 8x100Base-FX,SFP port; 40x10/100Base-T(X) RJ45 port

Accessories

Accessory Model	Description
Gigabit SFP module	See the selection table of industrial gigabit SFP module.
100M Fiber SFP module	See the selection table of industrial 100M fiber SFP module.
DT-FCZ-RJ45-01	Single-port RJ45 dust plug